

Characteristics of Alternatives 1 through 8 for Attributes

| Attributes | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 | Alt 6 | Alt 7 | Alt 8 |
|--|---|---|-----------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Fish and Game Code Components (legislation) | | | | | | | | |
| Habitat Restoration (based on 717,000 acre-feet/year average inflows) | | | | | | | | |
| Time to achieve biological results - Full Implementation | 2027 | 2031 | 2023 | 2074 | 2029 | 2031 | after 2078 | 2027 |
| Quality of habitat | Saline Habitat Complex | Saline Habitat Complex | Marine Sea | SHC with salinity limits and without cell walls | Marine Sea + Saline Habitat Complex | Marine Sea + Saline Habitat Complex | Marine Sea + Saline Habitat Complex | Marine Sea + Saline Habitat Complex |
| Quantity of habitat | 38,000 ac | 75,000 ac | 61,000 ac | 88,000 ac | 62,000 ac + 45,500 ac | 74,000 ac + 29,000 ac | 104,000 ac + 12,000 ac | 83,000 ac + 18,000 ac |
| Diversity of habitat - Fish | No Marine Sport Fish | No Marine Sport Fish | Marine Sport Fish | No Marine Sport Fish | Marine Sport Fish | Marine Sport Fish | Marine Sport Fish | Marine Sport Fish |
| Diversity of habitat - Salinity | 20,000 to 200,000 mg/L | 20,000 to 200,000 mg/L | 20,000 to 40,000 mg/L | 20,000 to 40,000 mg/L | 20,000 to 200,000 mg/L | 20,000 to 200,000 mg/L | 20,000 to 200,000 mg/L | 20,000 to 200,000 mg/L |
| Diversity of habitat - Saline Habitat Complex with islands/snags | 38,000 ac | 75,000 ac | 0 | 88,000 ac | 45,500 ac | 29,000 ac | 12,000 ac | 18,000 ac |
| Diversity of habitat - Depths | Less than 6 feet with up to 15 foot holes | Less than 6 feet with up to 15 foot holes | Up to 10 feet | Less than 6 feet with up to 15 foot holes | Up to 50 feet | Up to 50 feet | Up to 50 feet | Up to 50 feet |
| Diversity of habitat - Invertebrates | | | | | | | | |
| Construction disturbance to existing habitat - Riparian impacts due to Sed/Distribution Basins | 600 acres | 600 acres | 400 acres | 400 acres | 400 acres | 200 acres | 200 acres | 400 acres |
| Bathymetric considerations - Depths | Less than 6 feet with up to 15 foot holes | Less than 6 feet with up to 15 foot holes | Up to 10 feet | Less than 6 feet with up to 15 foot holes | Up to 50 feet | Up to 50 feet | Up to 50 feet | Up to 50 feet |
| Wildlife disease mgmt – accessibility of habitat | Equal | Equal | Equal | Equal | Equal | Equal | Equal | Equal |

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|--|---|---|---------------------------------|---------------------------------|---------------------------------|---|--|---|
| <i>Effects on T&E fish and wildlife - pupfish (others equal)</i> | see below | see below | see below | see below | see below | see below | see below | see below |
| <i>Effects on movement of species - pupfish</i> | 5 isolated areas + Salt Creek not connected | 5 isolated areas + Salt Creek not connected | All areas connect in First Ring | 4 isolated areas | 4 isolated areas | All areas connect in Marine Sea except south-east drains isolated | All areas connect in Marine Sea except south-east drains not connected | All areas connect in Marine Sea except Salt Creek not connected |
| Water Quality | | | | | | | | |
| Effects due to selenium - birds and fish | #2 | Least - #1 | #3 | Worst - #8 | #7 | #5 | #6 | #4 |
| Effects due to hydrogen sulfide | No | No | Not likely | No | Maybe | Maybe | Maybe | Maybe |
| Effects on salinity - will meet design objectives | Yes | Yes | Yes | Yes - not until 2074 | Yes | Yes | No - unless inflows exceed 800,000 af/year | Yes |
| Effects on temperature - will meet design objectives | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Effects on dissolved oxygen - will meet design objectives | Yes - will be low in morning | Yes - will be low in morning | Yes - may be delayed | Yes - will be low in morning | Yes - may be delayed | Yes - may be delayed | Yes - may be delayed | Yes - may be delayed |
| Causes erosion, siltation, or increased runoff, or flooding | No | No | No | No | No | No | No | No |
| Structures in 100-yr flood zone - Sea Bed and all facilities are in flood zone | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Causes inundation by seiche - compared Brine Sink and Marine Sea to Salton Sea | Maybe - less than No Action Alt | Maybe - less than No Action Alt | Maybe - less than No Action Alt | Maybe - less than No Action Alt | Maybe - less than No Action Alt | Maybe - less than No Action Alt | Maybe - less than No Action Alt | Maybe - less than No Action Alt |
| Effects on groundwater quality or quantity - will improve groundwater | Yes | No | No | No | No | No | No | No |

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|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Air Quality | | | | | | | | |
| Fugitive dust (construction) (tons/year) | 99 | 183 | 337 | 74 | 439 | 2,333 | 2,813 | 2,565 |
| Fugitive dust (O&M) (tons/year) | 10 | 18 | 34 | 7.4 | 44 | 233 | 281 | 257 |
| Fugitive dust -on exposed playa (tons/year) | 197 | 228 | 329 | 4,101 | 391 | 384 | 2,415 | 217 |
| Construction exhaust - Diesel PM10 + NO _x (tons/year) | 0.2 + 13 | 0.4 + 23 | 49 + 915 | 7 + 131 | 54 + 1,020 | 72 + 1,405 | 45 + 921 | 78 + 1,519 |
| O&M exhaust - Diesel PM10 + NO _x (tons/year) | 0 + 1.3 | 0 + 2.3 | 5 + 92 | 0.7 + 13 | 5 + 102 | 7 + 141 | 5 + 92 | 8 + 152 |
| Hazardous air pollutants - based on Sea Bed disturbance (millions cubic yards) | 77.14 | 136.53 | 18.81 | 154.215 | 86.77 | 66.97 | 33.522 | 47.23 |
| Odorous emissions (water quality related) | Possible from algae | Possible from algae | Possible from algae | Possible from algae | Possible for awhile | Possible for awhile | Possible for awhile | Possible for awhile |
| Additional Considerations | | | | | | | | |
| Recreation | | | | | | | | |
| Fishing | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Swimming | No | No | Yes | No | Yes | Yes | Yes | Yes |
| Motor boating | No | No | Yes | No | Yes | Yes | Yes | Yes |
| Recreational vehicles | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Non-motorized boating (canoes, kayaks) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Non-motorized boating (wind-surfing, sailing) | No | No | Yes | No | Yes | Yes | Yes | Yes |
| Water skiing | No | No | Yes | No | Yes | Yes | Yes | Yes |
| Wildlife watching | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Camping | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Hunting | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Substantially change rec opportunities | | | | | | | | |
| Economic Considerations | | | | | | | | |
| Economic development opportunities | | | | | | | | |
| Recreational economics | | | | | | | | |
| Cost - Capital | \$2.3 B | \$3.3 B | \$4.9 B | \$2.3 B | \$4.5 B | \$5.9 B | \$5.2 B | \$5.8 B |
| Cost - O&M/year | \$91 M | \$107 M | \$138 M | \$20 M | \$134 M | \$149 M | \$82 M | \$145 M |
| Cost - Present Value | \$4.8 B | \$6.3 B | \$8.7 B | \$2.9 B | \$8.2 B | \$10.0 B | \$7.5 B | \$9.8 B |

Characteristics of Alternatives 1 through 8 for Attributes

| Attributes | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 | Alt 6 | Alt 7 | Alt 8 |
|--|---|---|---|---|---|---|---|---|
| Amount of water required - inflow | 717,000 acre-feet/year | 717,000 acre-feet/year | 717,000 acre-feet/year | 717,000 acre-feet/year | 717,000 acre-feet/year | 717,000 acre-feet/year | 717,000 acre-feet/year | 717,000 acre-feet/year |
| Construction impacts to resources - based on imported rock and gravel (millions of cubic yards) | 6.72 | 11.67 | 85.15 | 7.42 | 53.73 | 93.65 | 79.65 | 100.27 |
| Energy for O&M - Gigawatt-hours/year | 16 | 19 | 27 | 8 | 26 | 30 | 4.4 | 29 |
| Sustainable – what could go wrong? | Salinity control and water available from drains | Brine Sink does not decline to allow build out | High sustain-ability | Salinity control and Brine Sink does not decline | Water quality does not improve | Water quality does not improve | Water quality does not improve and water not available | Water quality does not improve |
| Risks | | | | | | | | |
| Physical uncertainty | | | | | | | | |
| Biological uncertainty | | | | | | | | |
| Aesthetics | | | | | | | | |
| Noise – excess noise generation - based on traffic and placement of imported rock and gravel (millions of cubic yards) | 6.72 | 11.67 | 85.15 | 7.42 | 53.73 | 93.65 | 79.65 | 100.27 |
| Odor | Possible from algae | Possible from algae | Possible from algae | Possible from algae | Possible for awhile | Possible for awhile | Possible for awhile | Possible for awhile |
| Visuals – degrade character, quality Or scenic vistas | Yes - slight change until after 2017 | Yes - slight change until after 2017 | Yes - slight change until after 2017 | Yes - slight change until after 2017 | Yes - slight change until after 2017 | Yes - slight change until after 2017 | Yes - slight change until after 2017 | Yes - slight change until after 2017 |
| New source of light and glare | Equal | Equal | Equal | Equal | Equal | Equal | Equal | Equal |
| Traffic increases - construction: number of trucks and employee trips/day | 1050 | 1600 | 2700 | 1560 | 2900 | 3400 | 4200 | 4700 |
| Materials | | | | | | | | |
| Imported from? - Assumed from permitted quarries | Gravel only | Gravel only | Gravel and Rock | Gravel only | Gravel and Rock | Gravel and Rock | Gravel and Rock | Gravel and Rock |

Characteristics of Alternatives 1 through 8 for Attributes

| Attributes | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 | Alt 6 | Alt 7 | Alt 8 |
|---|------------------|------------------|---|------------------|---|---|---|---|
| Imported amounts based on imported rock and gravel (millions of cubic yards) | 6.72 | 11.67 | 85.15 | 7.42 | 53.73 | 93.65 | 79.65 | 100.27 |
| Excavated – fate of materials | To Brine Sink | To Brine Sink | To Brine Sink | To Brine Sink | To Brine Sink | To Brine Sink | To Brine Sink | To Brine Sink |
| Disturbance from excavation-based on Sea Bed disturbance (millions cubic yards) - | 77.14 | 136.53 | 18.81 | 154.215 | 86.77 | 66.97 | 33.522 | 47.23 |
| Availability | Yes | Yes | Large Rock may not be available in large quantity | Yes | Large Rock may not be available in large quantity | Large Rock may not be available in large quantity | Large Rock may not be available in large quantity | Large Rock may not be available in large quantity |
| Land Use | | | | | | | | |
| Compatibility with existing land uses (e.g. ag land, developed wetlands, refuge, State parks, wildlife areas) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Conversion of agricultural land - based on Sedimentation/Distribution Basins | 600 acres | 600 acres | 400 acres | 400 acres | 400 acres | 200 acres | 200 acres | 400 acres |
| Compatible with geothermal expansion | No | No | No | No | No | No | Yes | No |
| Compatible with Tribal land use plans, treaties | Yes | No | No | Yes | No | No | No | No |
| Distance from existing shoreline to water - in 2078 | 0.02 - 7.6 miles | 0.02 - 6.9 miles | 0.02 - 0.3 miles | 0.02 - 1.5 miles | 0.02 - 5.3 miles | 0.02 - 5.3 miles | 0.02 - 3.6 miles | 0.02 - 0.3 miles |
| Changes to lands above - 228 feet msl - including farm practices or available irrigation water | No | No | No | No | No | No | No | No |
| Changes to microclimate on southern shoreline | No | No | No | No | No | No | No | No |
| Compatible with County General Plan | No | No | Yes | No | Yes | Yes | Yes | Yes |

Characteristics of Alternatives 1 through 8 for Attributes

| Attributes | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 | Alt 6 | Alt 7 | Alt 8 |
|--|--|--|----------------------------|--|---|---|--|---|
| Adaptability (e.g. inflow changes) - if flows greater than 717,000 af/year | Saline Habitat Complex becomes smaller and Brine Sink becomes larger | Saline Habitat Complex becomes smaller and Brine Sink becomes larger | Brine Sink becomes larger | Saline Habitat Complex becomes smaller and Brine Sink becomes larger | Brine Sink becomes larger | Brine Sink becomes larger | Brine Sink and Marine Sea become larger | Brine Sink becomes larger |
| Adaptability (e.g. inflow changes) - if flows less than 717,000 af/year but greater than 650,000 af/year | Brine Sink becomes smaller | Brine Sink becomes smaller | Brine Sink becomes smaller | Brine Sink becomes smaller | Brine Sink becomes smaller | Brine Sink becomes smaller | Brine Sink becomes smaller | Brine Sink becomes smaller |
| Flexible components | Saline Habitat Complex - Yes | Saline Habitat Complex - Yes | Marine Sea - No | Saline Habitat Complex - Yes | Saline Habitat Complex - Yes Marine Sea - No | Saline Habitat Complex - Yes Marine Sea - No | Saline Habitat Complex - No Marine Sea - No | Saline Habitat Complex - Yes Marine Sea - No |
| Cultural resource protection - in Sea Bed | No | No | No | No | No | No | No | No |
| Paleontological resource protection- in Sea Bed | No | No | No | No | No | No | No | No |
| Acceptability – public, local, State, NGOs support | | | | | | | | |
| Public Health and Safety | | | | | | | | |
| Hazardous materials- based on Sea Bed disturbance (millions cubic yards) | 77.14 | 136.53 | 18.81 | 154.215 | 86.77 | 66.97 | 33.522 | 47.23 |
| Fish and bird consumption – selenium concentration | #2 | Least - #1 | #3 | Worst - #8 | #7 | #5 | #6 | #4 |
| Geologic hazards – seismic risk, ground failure - based on water contained by Berms, Barriers, and Perimeter Dikes (thousands of acre-feet of water) | 78 | 162 | 336 | 324 | 2,069 | 3,142 | 3,098 | 1,545 |
| Public exposure to unstable soils | No | No | No | No | No | No | No | No |

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| Attributes | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 | Alt 6 | Alt 7 | Alt 8 |
|--|--|--|--|--|--|--|--|--|
| <i>Risk due to vectors or air-borne disease-based on Sea Bed disturbance (millions cubic yards)</i> | 77.14 | 136.53 | 18.81 | 154.215 | 86.77 | 66.97 | 33.522 | 47.23 |
| <i>Effect on fire, police, or emergency services-based on Sea Bed disturbance (millions cubic yards)</i> | 77.14 | 136.53 | 18.81 | 154.215 | 86.77 | 66.97 | 33.522 | 47.23 |
| <i>Effect on stormwater, solid waste, communication facilities</i> | Will increase solid waste load | Will increase solid waste load | Will increase solid waste load | Will increase solid waste load | Will increase solid waste load | Will increase solid waste load | Will increase solid waste load | Will increase solid waste load |
| Length of time to: | | | | | | | | |
| Permitting by | 2014 | 2014 | 2014 | 2014 | 2014 | 2014 | 2014 | 2014 |
| Initiation of construction by | 2014 | 2014 | 2014 | 2014 | 2014 | 2014 | 2014 | 2014 |
| Timing of construction – timing windows | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 | Initially start in 2014 Will continue with AQM until 2040 |
| Completion of major construction | 2027 | 2031 | 2022 | 2038 | 2024 | 2031 | 2024 | 2024 |
| Achieve goals if goal is no marine sport fish | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Energy Development (geothermal & others) | No | No | No | No | No | No | No | No |
| Induce population growth | No | No | No | No | No | No | No | No |
| Loss of known mineral resource or local mineral recovery site | Least - #1 | #3 | #6 | #2 | #4 | #7 | #5 | Most - #8 |
| Environmental Justice – Disproportionately high impacts to minority or low income populations on the following: | | | | | | | | |
| <i>Health effects (bodily impairment, infirmity, illness or death)</i> | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| <i>High exposure to hazards (risk or rate of)</i> | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Note: All attributes that appear as *italics* are taken from the CEQA checklist as applied in the Draft Programmatic Environmental Impact Report (PEIR). Many attributes included in the CEQA checklist already identified by the work group were not duplicated on the table.